Effective Date: October 1, 2004 Revised from:

Policy: Low Iron infant formulas may be issued in extremely rare circumstances when a licensed health care professional determines that the client has a medical condition that precludes the use of iron fortified formula. Genetic and physiological factors related to iron loading are the only medical conditions that preclude the use of low iron formula. Phone authorization by a State Nutritionist is required prior to issuance.

In 1999 the American Academy of Pediatrics (AAP) Committee on Nutrition released the policy statement, Iron Fortification of Infant Formulas. This policy statement concludes that iron is important for the rapid growth and development of infants during their first year of life. The AAP states that there are no known medical contraindications to iron-fortified formulas (e.g., iron overload syndromes, colic, constipation, cramps, or gastroesophageal reflux) and recommends that infants who are not breastfed or are partially breastfed should receive an iron-fortified formula from birth to 12 months. (AAP, Pediatrics 1999: 104:119-123.)

Procedure:

- 1. Obtain a completed Special Formula Issuance Form from the health care professional.
 - a. A physician or ARNP/RPA working under the supervision of a physician must sign the Special Formula Issuance Form.
 - b. The following items are required to be documented before a low-iron infant formula may be issued.
 - Formula (brand name of the formula requested)
 - Acceptable diagnoses the medical reason that supports the issuance of a low-iron infant formula. Low-Iron infant formula will only be authorized for the following medical conditions.
 - <u>Hemochromatosis</u> up to the month in which the infant is 12-months old on the first day of the month.
 - <u>Iron transport deficiency anemia</u> (Atransferinemia) up to the month in which the infant is 12-months old on the first day of the month.
 - <u>Iron-utilization anemia</u> (Sideroblastic Anemia) up to the month in which the infant is 12-months old on the first day of the month.
 - <u>Jejunostomy or other G.I. surgical conditions</u> that may compromise absorption up to the month in which the infant is 4-months old on the first day of the month.

- <u>Multiple intramuscular and intravenous iron saccharate injections</u> up to the month in which the infant is 12-months old on the first day of the month.
- <u>Multiple transfusion of whole blood or erthrocytes</u> up to the month in which the infant was 12-months old on the first day of the month.
- Daily amount required.
- Length of time formula required
- Health care professional's name and signature.
- c. If the health care professional submits a referral form, note or hospital discharge sheet that includes all the required information, the CPA may complete the Special Formula Issuance Form based on the submitted information. The original information must be filed with the Special Formula Issuance Form.
- d. Contact the health care professional if all required information is not submitted.
- e. After ensuring all required information is documented, the CPA should complete the "WIC Office Use Only" section and sign the Special Formula Issuance Form.
- 2. If the diagnosis supports the request for a low-iron infant formula.
 - a. Contact a State Nutritionist at 785-296-1320 for authorization prior to issuing a low-iron infant formula.
 - Document the phone authorization on the Special Formula Issuance Form.
 - The written authorization must be filed with the Special Formula Issuance form when received.
 - b. Prescribe an age and situation appropriate food package containing the low-iron infant formula requested. (see Table).
 - The caregiver may request either the powdered or the concentrated liquid form.
 - If ready-to-feed formula is requested, document the reason in the client's KWIC record. Contact the SA for requests that do not list one of the approved reasons for ready-to-feed formula. (see Policy: FCI 02.1 – Infant Food Packages).
 - c. If the information submitted by the health care professional is missing or not complete.

- If the health care professional is available while the client is in the WIC clinic, one month's checks may be issued if the missing, required information is obtained by telephone and documented in the infant's WIC record.
- If the health care profession cannot be contacted while the client is in the WIC clinic, one month's checks may be issued if the CPA documents why the request for low-iron infant formula is valid in the client's WIC record.
- A completed Special Formula Issuance form must be on file at the WIC clinic before additional checks can be issued.
- 3. If the diagnosis does not support the request for a low-iron infant formula.
 - a. Review the infant's feeding history with the caregiver. Document findings in the infant's KWIC record.
 - b. Review the concerns that lead to request for a low-iron infant formula with the caregiver.
 - Iron fortification caused gastrointestinalor infectious problems.
 - A controlled study by Oski (*Pediatrics*. 1980; 66:168-170 and a double-blind crossover study by Nelson et al (*Pediatrics*. 1988; 81:360-364) compared ironfortified and low-iron formulas and found no differences in prevalence offussiness, cramping, colic, gastroesophageal reflux, or flatulence. Moreover, therapeutic iron up to 6 mg/kg per day given to infants is well-tolerated. (*Pediatrics*. 1985; 75:352-355)
 - These symptoms could also be caused by:
 - Incorrectly diluted formula or an unsanitary environment for formula preparation.
 - Ask or observe how bottles are prepared.
 - Ask how prepared formula is stored.
 - Ask what happens to partially used bottles of formula.
 - An unsafe water supply.
 - Ask if the source of water is a private well.
 - Ask if the water has been checked for safety and for nitrate content.

- Illness Ask about other symptoms such as fever, colds, and flu, etc..\
- Inappropriate feeding practices, including inappropriate burping or handling of infant during feeding.
 - Obtain diet history and check for early introduction of solids and juices or potential forced overfeeding. Also check for inappropriate liquids such as tea, "Kool-Aid", soft drinks, water, etc.
 - Ask parent about burping and handling methods during feeding.
 Recommend gentle burping and handling of the infant after feeding.
- Stressful home environment Explore with the parent how things are at home.
 Infants are perceptive to surrounding environments -- especially family interactions.
- Iron fortification caused constipation. Lack of a bowel movement every day does not necessarily indicate constipation. Ask for specific description of symptoms such as frequency, color, and consistency of stools.
- Iron fortification caused vomiting.
 - Many parents mistake spitting up for vomiting. Ask for specific information on amount and consistency of food usually refluxed. Ask if vomiting is projectile.
 - Evaluate the growth chart for adequate weight gain.
- c. If the history indicates that the issue is formula sensitivity or an intolerance to milk-based infant formula, suggest changing to another iron-fortified formula. Allow at least several days before assessing results.
- d. If the problem appears to be organic or psychologic pathology, refer to physician for evaluation.

Low-Iron Infant Formulas			
Food Package	Formula	Cereal	Juice
IK50009	9 cans powdered Enfamil Low Iron LIPIL		
IM5000	25 cans RTF Enfamil Low Iron LIPIL 1		
IK52009	9 cans powdered Similac Low Iron		
IM5200	25 cans RTF Similac Low Iron ¹		
IK50019	9 cans powdered Enfamil Low Iron LIPIL	24 oz Infant	
IM5001	25 cans RTF Enfamil Low Iron LIPIL 1	24 oz Infant	
IK52019	9 cans powdered Similac Low Iron	24 oz Infant	
IM5201	25 cans RTF Similac Low Iron ¹	24 oz Infant	
IK50029	9 cans powdered Enfamil Low Iron LIPIL	24 oz Infant	2 Containers
IM5002	25 cans RTF Enfamil Low Iron LIPIL ¹	24 oz Infant	2 Containers
IK52029	9 cans powdered Similac Low Iron	24 oz Infant	2 Containers
IM5202	25 cans RTF Similac Low Iron ¹	24 oz Infant	2 Containers

¹ KWIC Record must document need for RTF formula.